

# Dr. Alan J Scott

Professor, University of Wisconsin-Stout  
Chemistry and Physics Department  
College of Science, Technology, Engineering, Mathematics and  
Management

Office: 126B Jarvis Hall-Science Wing

Phone: 715-232-2401

Email: [scotta@uwstout.edu](mailto:scotta@uwstout.edu)

**Teaching Interests:** Physics, Physics Laboratory, Astronomy, Geology, Soil Mechanics, Statics, Statics and Strength of Materials, Applied Engineering Mechanics, Classical Mechanics, Cultural Physical Science, Applied Science Profession I.

**Research Interests:** Science Education, Physics Education, Physics Computer Simulations, Engineering Education, Nuclear and Particle Physics, Science and Public Policy, Pseudoscience and Unusual Claims.

## Education

- **Ph D Experimental Nuclear Physics**  
Kent State University  
Kent, OH, 1995
- **MS Physics**  
Kent State University  
Kent, OH, 1990
- **BS Physics Education**  
Bowling Green State University  
Bowling Green, OH, 1987

## Licensures and Certifications

- Certified to Teach Physics and Math at the High School Level:

## Work Experience

### Academic - Post-Secondary

- **University of Wisconsin-Stout**, Physics  
Professor  
1996 -
- **University of Wisconsin-Stout**, Physics  
Department Chair  
2014 - 2015
- **College of Wooster**  
Visiting Assistant Professor of Physics  
1995 - 1996
- **Kent State University**  
Graduate Teaching and Research Assistant  
1991 - 1995

### Academic - P-12

- **Wood County Local School Districts**  
Substitute Teacher  
1987

## Intellectual Contributions

### Journal Article

- Scott, A. J. (2014). Blown Away. *The Physics Teacher*.
- Scott, A. J. (2013). Busting Bolts. *Physics Education*.
- Scott, A. J. Civic Engagement and Science Education. *International Journal of Polytechnic Studies*, 1(1).
- Scott, A. J. (2010). Daddy's Stories About Rocket Ships, Dinosaurs, Trains and more. *Lulu.com*.
- Scott, A. J. (2010). Blind-Sided by a Culture of Disinformation. *Skeptical Inquirer*.
- Scott, A. J. (2009). Gulf War Illness, Real or Myth, Letter-to-the-Editor. *Skeptic*, 1(1).
- Scott, A. J. Sputnik – 50 Years Later. *Physics and Society newsletter*.
- Scott, A. J. (2007). Danger! Scientific Inquiry Hazard. *Skeptical Inquirer*.
- Scott, A. J. (2005). Sand Diver. *The Physics Teacher*.
- Scott, A. J. 3D Spreadsheet Simulation of a Modern Particle Detector. *Physics Education*.
- Scott, A. J. (2003). Sniffer Plane Secrets and Political Courage. *Forum on Physics and Society*.
- Scott, A. J. The Neurobiological Connection of Physics Education Research. *American Journal of Physics*.
- Scott, A. J. The Neurobiological Connection of Physics Education Research. *Virtual Journal of Biological Physics Research*.
- Scott, A. J., Barnhart, C., Parejko, K., Schultz, F., & Schultz, S. Skeptical Science: Teaching Students To Think Critically About Unusual Claims. *The Science Teacher*.
- Scott, A. J. (2000). Geology on the Web and In the Classroom: Designing a Curriculum For Non-Science Students. *Teaching with Technology Today (TTT)*.
- Scott, A. J. (2000). Physics of Dirt: An Introduction to Soil Mechanics. *Physics Education*.
- Scott, A. J. Science Curriculum Goals at Odds With Academia Supported Pseudoscience, Forum on Education. *APS Newsletter*.
- Justice, M., Albergo, S., Bieser, F., Brady, F. P., Caccia, Z., Cebra, D. A., Chacon, A. D., Chance, J. L., Choi, Y., Costa, S., Elliot, J. B., Gilkes, M. L., Hauger, J. A., Hirsch, A. S., Hjort, E. L., Insolio, A., Keane, D., Kintner, J. C., Lisa, M. A., Liu, H., Matis, H. S., McGrath, R., McMahan, M., McParland, C., Olson, D. L., Partlan, M. D., Porile, N. T., Potenza, R., Rai, g., Rasmussen, J. O., Rasmussen, H. G., Romanski, J., Romero, J. L., Russo, G. V., Scharenberg, R. P., Scott, A. J., Shao, Y., Srivastava, B. K., Symons, T. J., Tincknell, M., Tuve, C., Wang, S., Warren, P. G., Weerasundara, D., Wieman, H. H., Wienold, T., & Wolf, K. Hyperons in 2 A GeV Ni + Cu collisions (EOS Collaboration. *Nuclear Physics Refereed Journal*, 400, 12-19.
- Scott, A. J., Salt, B., & Parejko, K. (1998). A Public Debate On Science, Pseudoscience, and Spiritualism From The Perspective of a Physicist, Sociologist, and Biologist. *Physics and Society*.
- Kintner, J. C., & Scott, A. J. Pion Flow and Antiflow in 1.15A GeV Au + Au. *Nuclear Physics Refereed Journal*.
- Scott, A. J., & Hjort, E. L. Resonance Production in 58Ni + Cu Collisions at E = 1.97 A GeV. *Nuclear Physics Refereed Journal*, 79.
- Chance, J., & Scott, A. J. The Energy Dependence of Flow in Ni Induced Collisions from 400A to 1970A MeV. *Nuclear Physics Refereed Journal*.
- Hauger, J. A., & Scott, A. J. Dynamics of the Multifragmentation of 1A GeV Gold on Carbon. *Nuclear Physics Refereed Journal*.
- Wang, S., & Scott, A. J. In-plane Retardation of Collective Expansion in Au + Au Collisions. *Nuclear Physics Refereed Journal*.
- Partlan, M. D., & Scott, A. J. Fragment Flow in Au + Au Collisions. *Nuclear Physics Refereed Journal*.
- Wang, & Scott, A. J. Light Fragment Production and Power Law Behavior in Au + Au Collisions. *Nuclear Physics Refereed Journal*.
- Lisa, M. A., & Scott, A. J. Radial Flow in Au + Au Collisions at E = 0.25 - 1.15 A GeV. *Nuclear Physics Refereed Journal*.

- Scott, A. J., & Gilkes, M. L. The Determination of Nuclear Matter Critical Exponents from the Multifragmentation of Gold Nuclei. *Nuclear Physics Refereed Journal* .

## Manual

- Scott, A. J. (2006). Physical Science Textbook and Solution Manual Addicted to Placebos: Understanding Science and Society. .

## Presentations

### Uncategorized

- Scott, A. J. (June, 2014). Utilizing Errors (i.e. Mistakes), . WAPT Conference, Yakima, WA.
- Scott, A. J. (June, 2013). Bending and Busting. WAPT Conference, Yakima, WA.
- Scott, A. J. (June, 2012). WAPT Conference. WAPT Conference, Yakima, WA.
- Scott, A. J. (June 9, 2011). Civic Engagement and Science Education. National Polytechnic Conference, Marietta, GA.
- Scott, A. J. (2010). Video Projects in the Classroom. Professional Development Week ,
- Scott, A. J. (October 9, 2010). Busting Bolts. WAPT Conference, Yakima, WA.
- Scott, A. J. (September 15, 2009). Cars on Mars. University Honors Program presentation,
- Scott, A. J. (November 28, 2006). Addicted to Placebos. WAPT Meeting,
- Scott, A. J. (November 3, 2006). A Briefer History of Time by Stephen Hawking. Honor's Program Presentation,
- Scott, A. J. (2005). Gravity Surveys in Geophysics. WAPT Meeting,
- Scott, A. J. (January 12, 2005). Celebrating Interplanetary Space Exploration. , Menomonie, WI.
- Scott, A. J. (2004). A Perilous Ride With Archimedes and Newton. WAPT Meeting,
- Scott, A. J. (2003). 3-D Spreadsheet Simulation of a Modern Particle Detector. WAPT Meeting,
- Scott, A. J. (2003). The Risks of Not Providing Students with Risk Analysis Skills. WSST, WI.
- Scott, A. J. (October 9, 2003). Volcanoes of the Cascade Mountain Range in the Pacific Northwest. Public Presentation, UW-Stout ,
- Scott, A. J. (2002). Using Unusual Claims in the Physics Classroom. AAPT Conference, Boise, ID.
- Scott, A. J. (2002). Consumer Protection Physics. WAPT Meeting,
- Scott, A. J. (2002). Using Unusual Claims To Teach Science. WSST Convention,
- Scott, A. J. (April 21, 2002). Presentation on PK-16 Collaborations. UW-Stout Professional Development Session,
- Scott, A. J. (2001). Sand Diver. WAPT Meeting,
- Scott, A. J., & Barnhart, C. (October 26, 2001). Using Science to Evaluate Unusual Claims. WEAC Convention,
- Scott, A. J. (January 17, 2001). Presentation on Critical Thinking. UW-Stout Professional Development Session,
- Scott, A. J. (2000). Stout Science Program For Educators. WAPT Meeting,
- Scott, A. J. (November, 2000). Stout Science Program For Educators. UW-Stout Research Day ,
- Scott, A. J. (1999). Fact or Fiction: Using Science Fiction Movies As An Instructional Tool. AAPT Conference,
- Scott, A. J. (April, 1997). Neural Networks: Theory and Application. Math Colloquium, Menomonie, WI.

### Presentation/Workshop

- Scott, A. J. (2005). Science Literacy and Consumer Marketing of Technology. Chippewa Falls Technology ,

### Panelist

- Scott, A. J. (March 18, 2004). Newman Club discussion of Science and Religion. ,

### Seminar

- Scott, A. J. (February 21, 2003). Ethics and Marketing Placebos. UW-Stout Ethics Seminar, Menomonie, WI.

### Poster

- Scott, A. J. (2001). Stout Science Program For Educators. UW-Stout Research Day ,

### Special Presentation

- Scott, A. J., Barnhart, Schultz, S., & Schultz, F. S. (2001). Biotechnology Across The Curriculum. Wisconsin and Family Consumer Education, 2001 Annual Conference, Menomonie, WI.

## Grants, Contracts, and Sponsored Research

### Grant

- Scott, A. J. Billion Pavilion. Sponsored by RocketHub.com Crowdsourcing Proposal, \$19784 (Not Funded).
- Scott, A. J. Astro-Compass Science Initiative. Sponsored by Wisconsin ESEA Improving Teacher Quality grant program, \$26000.
- Scott, A. J. Creating Opportunities for Educators in Science Education at UW-Stout. Sponsored by UW-Stout Professional Development Grant, \$1872 (Funded).
- Scott, A. J. Stout Science Program For Educators: Using Good Science and Pseudoscience As A Tool To Improve Student Competencies in Science and Critical Thinking. Sponsored by Eisenhower Professional Development Grant, \$130000.

### Contract

- Scott, A. J. Submersible Pilotless Diving Platform with Instrument Payload. Sponsored by Utility Patent Submission (Not Funded).

## Media Contributions

### Newspaper

- **Dunn County News** (July 18, 2014)  
E. Thompson, From The Stacks, (collaborative project with Menomonie Public Library).
- **Dunn County News** (March 5, 2014)  
Mote of Dust Suspended in a Sunbeam.
- **Dunn County News** (November 20, 2013)  
Alvarez and the Kennedy Assassination.
- **Dunn County News** (June 2, 2013)  
Guns and Public Policy.
- **Dunn County News** (August 29, 2012)  
Doctor Who and the Economic Implosion.
- **Dunn County News** (June 5, 2012)  
Castles for the One-Percent. (Letter)

- **Dunn County News** (January 22, 2012)  
Tackling the Football Fan.
- **Dunn County News** (May 29, 2011)  
Beyond Theory: Modern View of the Atom Turns 100.
- **Dunn County News** (February 9, 2011)  
The Great Eco-Unfriendly Trade-Off.
- **Dunn County News** (July 15, 2009)  
Tribute to Darwin.
- **Dunn County News** (December 14, 2008)  
Flying Wedge Economics.
- **Dunn County News** (May 11, 2008)  
Relative Degrees of Wrongness.
- **Dunn County News** (December 24, 2006)  
Real Alien Hunters.
- **Dunn County News** (November 8, 2006)  
Keep Politics Out of Science.
- **Dunn County News** (September 18, 2005)  
Risky Business.
- **Dunn County News** (2004)  
Space Visitor Made Big Hole.
- **Dunn County News** (April 21, 2004)  
The Wacky Politics of Energy.
- **Dunn County News** (November 2, 2000)  
Laetrile: A Persistent, Dangerous, and Fraudulent Cancer Remedy
- **Dunn County News** (September 14, 1997)  
Public Debate on Pseudoscience and Science.

## **Reviewer / Editor**

### **Editor, Associate Editor**

- Reviewed a Faculty Research Initiative proposal for Research Services at UW-Stout. (April 21, 2002)

## **Awards, Fellowships, Honors, and Scholarships**

### **Honor**

- Honorary Member of Sigma Lambda , (1999)

## **Professional Memberships**

- Union of Concerned Scientists
- CFIDS Association of America
- Wisconsin Association of Physics Teachers
- American Association of Physics Teachers
- American Physical Society (APS)

## Service

### Department / School

- **Committee Member**, Applied Science Program Committee (2006 - Present)
- **Committee Member**, construction program advisory board (1997 - Present)
- **Physics Department liaison**, Construction Program (1997 - Present)
- **Committee Member**, Faculty Search Committee (2013 - 2015)
- **Committee Chair**, STEM College Full Professor Promotion Committee (2013)
- **Committee Member**, Faculty Search Committee (2011)
- **Committee Chair**, Faculty Search Committee (2010)
- **Committee Member**, Faculty Search Committee (2010)
- **Committee Chair**, STEM College Promotion Committee (2010)
- **Demonstration**, STEM Tours (April 16, 2010)
- **Committee Member**, UW-System grant proposal review committee for the ESEA Wisconsin Improving Teacher (October 2009)
- **Committee Member**, College of Arts and Sciences, Promotion Committee (2006)
- **Committee Member**, Faculty Search Committee (2004 - 2005)
- **Physics Department Representative**, Faculty Senate (2004 - 2005)
- **Committee Member**, Applied Science Committee (1999 - 2005)
- **Director**, Applied Science Program (2004)
- **UW-Stout representative**, ESEA (Teacher Professional Development) Grant Review Committee (2003 - 2004)
- **Group Facilitator**, Honor's Program on Godel's Proof (2003)
- **Promotion Committee Member**, College of Arts and Science (2002)
- **Promotion Committee Member**, College of Arts and Science (2000)

### University

#### UW Stout

- **Representative**, Faculty Senate (2006 - 2007)
- **Undergraduate Honors Thesis Advisor**, (May 2004)
- **Undergraduate Honors Thesis Advisor**, (May 2004)

### Professional

- **Event Supervisor**, Wisconsin State Science Olympiad (2014)
- **Group Facilitator**, Honor's Program (2010 - 2014)
- **Event Supervisor**, Wisconsin State Science Olympiad (2012 - 2013)
- **Event Supervisor**, Wisconsin State Science Olympiad (2011)
- **Event Supervisor**, Science Olympiad (April 2, 2011)
- **Event Supervisor**, Wisconsin State Science Olympiad (2009 - 2010)
- **Event Supervisor**, Regional Science Olympiad (2006 - 2008)
- **Event Supervisor**, Wisconsin State Science Olympiad (2006 - 2007)

- **Event Supervisor**, Wisconsin State Science Olympiad (2006)
- **Event Supervisor-Fermi Questions**, Regional Science Olympiad at Menomonie (2004 - 2005)
- **Event Supervisor**, Wisconsin State Science Olympiad (2001 - 2005)

## Community

- **Nuclear Science Merit Badge Counselor**, Boy Scouts of America (January 31,2015 - 2015)
- **Master of Ceremonies**, Menomonie Public Library (June 28,2014 - 2014)
- **Cast Member**, Menomonie Theater Guild (March 2013 - 2013)
- **Nuclear Science Merit Badge Counselor**, Boy Scouts of America (February 2012 - 2012)
- **Guest Presenter**, Science and Religion (September 21,2011 - 2011)
- **Merit Badge Councilor**, Boy Scouts of America (2010 - 2010)
- **Demonstrator** , DeLong Middle School (2010)
- **Volunteer**, St. Joseph Elementary School (October 17,2003 - May 2006)
- **Volunteer**, St. Joseph elementary (January 9,2006 - January 9, 2006)
- **Co-Chair**, Church Festival (2005 - 2005)
- **Assistant Coach**, Weidner Clinic team (2005 - 2005)
- **Assistant Cub Scout Den Leader**, Boy Scouts of America (2004 - 2005)
- **Head Coach**, Menomonie Recreation Program (2004 - 2004)
- **Assistant Soccer Coach**, Red Cedar Soccer League (2004 - 2004)
- **Assistant Soccer Coach**, Red Cedar Soccer League (2004 - 2004)
- **Destination Imagination Coach**, St. Joseph School (2004 - 2004)
- **Volunteer**, Downsview Elementary (April 22,2004 - April 22, 2004)
- **Assistant Soccer Coach**, Red Cedar Soccer League (2003 - 2003)
- **Destination Imagination Coach**, St. Joseph School (2003 - 2003)
- **Volunteer**, Crystal Cave owner Blaze Cunningham (2002 - 2002)
- **Member**, Knights of Columbus member (2000 - 2001)